microfiche appendix--.

Page 18, line 23: correct "dabe/" to read --label--.

Page 28, line 17: between "used" and/"a" insert --as--.

Page 32, line 10: correct "allow" to read --also--.

Page 33, line 17: correct/"When s " to read --When a --

Page 34, line 31: correct "4242" to read --424 -

In The Appendix:

Please replace the paper appendix as originally submitted, with the attached microfiche appendix in compliance with 37 CFR \$1.96(c).

In The Claims:

Please amend claims 1-3, 5-7, 9-10, and 16, and add claims 19-81, all as shown below in the full set of all pending claims presented for the Examiner's convenience.

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1. (Twice Amended) A method for operating a computer system including a memory configured according to a logical table, a central processing unit and a display, said method including the steps of:

configuring an extensible[said] logical table to include:

- a plurality of rows, each said row including an object identification number (OID) to identify each said row, each said row corresponding to a record of information;
- 9 a plurality of columns intersecting said plurality of rows 10 to define a plurality of cells, <u>a cell being basic unit of</u>
- 11 storage, each said column including an OID to identify each said
- 12 column; and wherein
- at least one row includes a fields cell having references to
- 14 a plurality of label[1]ed columns.

1 2. (Once Amended) The method of claim 1 wherein said
2 fields cell further includes information related to each of said
3 label[1]ed columns.

3. (Once Amended) The method of claim 1 further comprising the step of performing an operation on data within said label[l]ed columns according to said [template]at least one row.

1 4. The method of claim 3 wherein said operation comprises 2 at least one of the following: an editing operation, a printing 3 operation, a searching operation or an exporting operation.

5. (Once Amended) The method of claim 1 wherein said
[template] at least one row comprises a template for a structured
e-mail message.

6. (Once Amended) A method for storing and retrieving data in a computer system including a memory, a central processing unit and a display, said method including the steps of:

configuring said memory according to an extensible logical table, said extensible logical table including:

a plurality of rows, each said row including an object identification number (OID) to identify each said row, each said row corresponding to a record of information;

a plurality of columns intersecting said plurality of rows to define a plurality of cells, a cell being basic unit of storage, each said column including an OID to identify each said

12 column, at least one cell in a particular row including a

13 definition, said definition including a reference to at least one

14 column;

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automatically adding to said one cell a reference to a <u>first</u> row according to said definition.

- The method of claim 6 wherein said definition includes
- 2 a reference to every row that includes a valid value in a
- 3 [certain] first column.

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- The method of claim 6 wherein said definition includes 1 2 a query that results in references to a plurality of rows that 3 satisfy the query.
- 1 The method of claim [5]6 wherein said first[particular] 2 row comprises a folder type row.



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10. (Once Amended) A method for storing and retrieving data in a computer system including a memory, a central processing unit and a display, said method including the steps of:

configuring said memory according to an extensible logical table, said extensible logical table including:

a plurality of rows, each said row including an object identification number (OID) to identify each said row, each said row corresponding to a record of information;

a plurality of columns intersecting said plurality of rows to define a plurality of cells, a cell being basic unit of storage, each said column including an OID to identify each said column, at least one of said columns including information to indicate an indexing method corresponding to said column; and

14 indexing said at least one column according to said indexing

15 method.

> 11. The method of claim 10 wherein:

at least one of said cells includes a pointer to an index record: and

said indexing method includes the steps of:

searching said table for at least two key words; and 6 creating index records for at least two key words, said 7 index records including one or more pointers to cells in said

8 table that contain said key words.

12. The method of claim 11 further including the step of querying said table, said step querying said table further including the steps of:

locating one of said index records according to the query of 7902

5 a user;

6 retrieving at least one cell in said table pointed to by 7 said located index record.

- 1 13. The method of claim 12 wherein said step of locating 2 one of said index records further includes the steps of locating 3 at least one of said index records pointed to by said at least 4 one retrieved cell.
- 1 14. The method of claim 13 further including the step of 2 weighting key words and retrieved cells according to pre-defined 3 search criteria.
- 1 15. The method of claim 13 further including the step of 2 filtering key words and retrieved cells according to pre-defined 3 search criteria.

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16. (Once Amended) A method for storing and retrieving data in a computer system including a memory, a central processing unit and a display, said method including the steps of:

configuring said memory according to an extensible logical table, said extensible logical table including:

a plurality of rows, each said row including an object identification number (OID) to identify each said row, each said row corresponding to a record of information;

a plurality of columns intersecting said plurality of rows to define a plurality of cells, a cell being the basic unit of storage, each said column including an OID to identify each said column, at least one cell in a particular row including an annotation such that said annotation cell is fully integrated

14 into said logical table; and
15 performing an operation on said cell including said

16 annotation.

1 17. The method of claim 16 wherein said operation comprises 2 indexing.

18. The method of claim 16 wherein said annotation cell includes hypertext.



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19. (Newly Presented) A method for storing and retrieving data in a computer system including a memory, a central processing unit and a display, said method including the steps of:

configuring said memory according to a logical table, said logical table including:

a plurality of rows, each said row including an object identification number (OID) to identify each said row, each said row corresponding to a record of information;

a plurality of columns intersecting said plurality of rows to define a plurality of cells, each said column including an OID to identify each said column, at least one of said columns including information to indicate an indexing method corresponding to said column, at least one of said cells includes a pointer to an index record;

indexing said at least one column according to
said indexing method, said indexing method includes the
steps of;

searching said table for at least two key words; creating index records for at least two key words, said index records including one or more pointers to cells in said table that contain said key words;

querying said table, said step querying said table further including the steps of:

locating one of said index records according to the query of a user;

retrieving at least one cell in said table pointed to by said located index record, said step of locating one of said index records further includes locating at least one of said index records pointed to by said at least one retrieved cell; and weighting key words and retrieved cells according to pre-

weighting key words and retrieved cells according to p defined search criteria.

1 20. (Newly Presented) A method for storing and retrieving 2 data in a computer system including a memory, a central 3 processing unit and a display, said method including the steps of: 4 5 configuring said memory according to a logical table, said 6 logical table including; 7 a plurality of rows, each said row including an object identification number (OID) to identify each said row, each said 8 9 row corresponding to a record of information; a plurality of columns intersecting said plurality of rows 10 11 to define a plurality of cells, each said column including an OID to identify each said column, at least one of said columns 12 13 including information to indicate an indexing method 14 corresponding to said column, at least one of said cells includes 15 a pointer to an index record; 16 indexing said at least one column according to 17 said indexing method, said indexing method includes the 18 steps of: 19 searching said table for at least two key words; creating index records for at least two key words, said 20 21 index records including one or more pointers to cells in said 22 table that contain said key words; 23 querying said table, said step querying said table further 24 including the steps of: 25 locating one of said index records according to the guery of 26 a user: 27 retrieving at least one cell in said table pointed to by said located index record, said step of locating one of said 28 29 index records further includes locating at least one of said index records pointed to by said at least one retrieved cell; and 30 31 filtering key words and retrieved cells according to pre-defined 32 search criteria.

1 21. (Newly Presented) A method for storing and retrieving 2 data in a computer system including a memory, a central 3 processing unit and a display, said method including the steps
4 of:

5 configuring said memory according to a logical table, said 6 logical table including;

a plurality of rows, each said row including an object identification number (OID) to identify each said row, each said row corresponding to a record of information;

a plurality of columns intersecting said plurality of rows to define a plurality of cells, each said column including an OID to identify each said column, at least one cell in a particular row including an annotation such that said annotation cell is fully integrated into said logical table; and

performing an operation on said cell including said annotation wherein said annotation cell includes hypertext.

22. (Newly Presented) A method for storing and retrieving data in a computer system memory comprising the steps of:

configuring said memory according to an extensible logical table having a plurality of intersecting rows and columns defining a plurality of cells, at least one of said cells includes a pointer to an index record;

indexing at least one column by;

creating index records for said at least two key words, said index records including one or more pointers to cells in said extensible logical table that contain said at least two key words;

locating one of said index records according to the query of a user;

retrieving at least one cell in said extensible logical table pointed to by said located index record;

locating at least one of said index records pointed to by said at least one retrieved cell; and

weighting key words and retrieved cells according to pre-defined search criteria.



23. (Newly Presented) A method for storing and retrieving data in a computer system memory comprising the steps of:

configuring said memory according to an extensible logical table having a plurality of intersecting rows and columns defining a plurality of cells;

creating index records for at least two key words, said index records including one or more pointers to cells in said extensible logical table that contain said key words, at least one of said cells includes a pointer to an index record;

indexing at least one column according to an indexing
method;

locating one of said index records according to the query of a user;

retrieving at least one cell in said table pointed to by said located index record;

locating at least one of said index records pointed to by said at least one retrieved cell; and

filtering key words and retrieved cells according to pre-defined search criteria.

24. (Newly Presented) A method for storing and retrieving data in a computer system memory comprising the steps of:

configuring said memory according to an extensible logical table having a plurality of intersecting rows and columns defining a plurality of cells, at least one of said columns including information to indicate an indexing method corresponding to said column, at least one cell includes an annotation such that said annotation cell is fully integrated into said extensible logical table; and

performing an operation on said cell including said annotation wherein said annotation cell includes hypertext.

25. (Newly Presented) In a method for storing and retrieving information in a computer memory by configuring said memory according to a logical table having a plurality of rows,

4 each said row corresponding to a record of information, and a 5 plurality of columns intersecting said plurality of rows to

6 define a plurality of cells, the improvement comprising:

7 including references to a plurality of labeled columns in a 8 fields cell in at least one row.

- 1 26. (Newly Presented) The method of claim 25 wherein said 2 fields cell further comprises information related to each of said 3 columns.
- 1 27. (Newly Presented) The method of claim 25 further 2 comprising the step of performing an operation on data within 3 said columns according to said at least one row.
 - 28. (Newly Presented) The method of claim 27 wherein said operation comprises at least one of the following: an editing operation, a printing operation, a searching operation or an exporting operation.
- 1 29. (Newly Presented) The method of claim 25 wherein said 2 at least one row comprises a template for a structured e-mail 3 message.
- 1 30. (Newly Presented)) In a method for storing and 2 retrieving information in a computer memory by configuring said 3 memory according to a logical table having a plurality of rows, 4 each said row corresponding to a record of information, and a 5 plurality of columns intersecting said plurality of rows to 6 define a plurality of cells, the improvement comprising: 7 including a definition in at least one cell in a first row, said definition including a reference to at least one column; 8 9 automatically adding to said one cell a reference to a 10 second row according to said definition.
- 1 31. (Newly Presented) The method of claim 30 wherein said 2 definition includes a reference to every row that includes a 3 valid value in a first column.



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- 1 32. (Newly Presented) The method of claim 30 wherein said 2 definition includes a query that results in references to a 3 plurality of rows that satisfy the query.
- 1 33. (Newly Presented) The method of claim 30 wherein said 2 first row comprises a folder type row.
- 1 34. (Newly Presented)) In a method for storing and 2 retrieving information in a computer memory by configuring said 3 memory according to a logical table having a plurality of rows, 4 each said row corresponding to a record of information, and a 5 plurality of columns intersecting said plurality of rows to 6 define a plurality of cells, the improvement comprising: 7 including information in at least one of said columns to 8

indicate an indexing method corresponding to said column; and
 indexing said at least one column according to said indexing
method.

1 35. (Newly Presented) The method of claim 34 wherein: 2 at least one of said cells includes a pointer to an index 3 record; and

said indexing method includes the steps of:
 searching said table for at least two key words; and
 creating index records for at least two key words, said
index records including one or more pointers to cells in said

8 table that contain said key words.

1 36. (Newly Presented) The method of claim 35 further 2 including the step of querying said table, said step querying 3 said table further including the steps of:

locating one of said index records according to the query of a user;

6 retrieving at least one cell in said table pointed to by 7 said located index record.

37. (Newly Presented) The method of claim 36 wherein said

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- 2 step of locating one of said index records further includes the
- 3 steps of locating at least one of said index records pointed to
- 4 by said at least one retrieved cell.
- 1 38. (Newly Presented) The method of claim 37 further
- 2 including the step of weighting key words and retrieved cells
- 3 according to pre-defined search criteria.
- 1 39. (Newly Presented) The method of claim 37 further
- 2 including the step of filtering key words and retrieved cells
- 3 according to pre-defined search criteria.
 - 40. (Newly Presented)) In a method for storing and retrieving information in a computer memory by configuring said memory according to a logical table having a plurality of rows, each said row corresponding to a record of information, and a plurality of columns intersecting said plurality of rows to define a plurality of cells, the improvement comprising:

7 including an annotation in at least one cell in a first row, 8 said annotation cell being fully integrated into said logical

9 table; and

performing an operation on said at least one cell including said annotation.

- 1 41. (Newly Presented) The method of claim 40 wherein said 2 operation comprises indexing.
- 1 42. (Newly Presented) The method of claim 40 wherein said 2 annotation cell includes hypertext.
- 1 43. (Newly Presented) A device for storing and retrieving 2 data in a computer system memory comprising:

an extensible logical table having a plurality of

4 intersecting rows and columns defining a plurality of cells;

5 at least one row includes a fields cell having references to 6 a plurality of labeled columns

7 an index record for at least two key words, said index 7902



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8 record including one or more pointers to cells in said extensible

9 logical table that contain said at least two key words;

means for locating one of said index records according to the query of a user;

means for retrieving at least one cell in said extensible

13 logical table pointed to by said located index record;

means for locating at least one of said index records

15 pointed to by said at least one retrieved cell; and

16 means for weighting key words and retrieved cells according

17 to pre-defined search criteria.

1 44. (Newly Presented) A device for storing and retrieving 2 data in a computer system memory comprising:

an extensible logical table having a plurality of intersecting rows and columns defining a plurality of cells;

at least one row includes a fields cell having references to a plurality of labeled columns

an index record for at least two key words, said index record including one or more pointers to cells in said extensible logical table that contain said at least two key words;

means for locating one of said index records according to the query of a user;

means for retrieving at least one cell in said extensible logical table pointed to by said located index record;

means for locating at least one of said index records pointed to by said at least one retrieved cell; and

means for filtering key words and retrieved cells according to pre-defined search criteria.

1 45. (Newly Presented) A device for storing and retrieving 2 data in a computer system memory comprising:

3 an extensible logical table having a plurality of

4 intersecting rows and columns defining a plurality of cells;

at least one row includes a fields cell having references to a plurality of labeled columns

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at least one cell includes an annotation such that said annotation cell is fully integrated into said extensible logical table; and

10 performing an operation on said cell including said 11 annotation wherein said annotation cell includes hypertext.

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46. (Newly Presented) A method for operating a computer system memory comprising the steps of:

configuring an extensible logical table to include:

a plurality of rows, each row corresponding to a record of information;

a plurality of columns intersecting said plurality of rows to define a plurality of cells; and

at least one row includes a fields cell having references to a plurality of columns.

- 47. (Newly Presented) The method of claim 46 wherein said fields cell further includes information related to each of said referenced columns.
- 1 48. (Newly Presented) The method of claim 46 further 2 comprising the step of:

performing an operation on data within said referenced columns according to said at least one row.

- 1 49. (Newly Presented) The method of claim 48 wherein said 2 operation comprises at least one of the following: an editing 3 operation, a printing operation, a searching operation or an 4 exporting operation.
- 1 50. (Newly Presented) The method of claim 46 wherein said 2 at least one row comprises a template for a structured e-mail 3 message.
- 1 51. (Newly Presented) A method for storing and retrieving 2 data in a computer system memory comprising the steps of:
- 3 configuring an extensible logical table in a computer system 7902

4	memory to include:
5	a plurality of rows, each row corresponding to a
6	record of information;
7	a plurality of columns intersecting said plurality
8	of rows to define a plurality of cells;
9	at least one cell in a first row including a
10	definition, said definition including a reference to at
11	least one column; and
12	automatically adding to said at least one cell a reference
13	to a second row according to said definition.
1	52. (Newly Presented) The method of claim 51 wherein said
2	definition includes a reference to every row that includes a
3	valid value in a first column.
1	53. (Newly Presented) The method of claim 51 wherein said
2	definition includes a query that results in references to a
3	plurality of rows that satisfy the query.
1	54. (Newly Presented) The method of claim 51 wherein said
2	first row comprises a folder type row.
1	55. (Newly Presented) A method for storing and retrieving
2	data in a computer system memory comprising the steps of:
. 3	configuring an extensible logical table in a computer system
4	memory to include:
5	a plurality of rows, each row corresponding to a
6	record of information;
7	a plurality of columns intersecting said plurality
8	of rows to define a plurality of cells; and
9	at least one of said columns including information
10	to indicate an indexing method corresponding to said
11	column; and
12	indexing said at least one column according to said indexing

method.

1 56. (Newly Presented) The method of claim 55 wherein: 2 at least one of said cells includes a pointer to an index 3 record; and 4 said indexing method comprises the steps of: 5 searching said extensible table for at least two key words; and 6 7 creating index records for at least two key words, said 8 index records including one or more pointers to cells in 9 said extensible table that contain said key words.

1 57. (Newly Presented) The method of claim 56 further 2 comprising the steps of:

locating one of said index records according to the query of a user;

retrieving at least one cell in said table pointed to by said located index record.

- 1 58. (Newly Presented) The method of claim 57 wherein said 2 step of locating one of said index records further comprises the 3 step of locating at least one of said index records pointed to by 4 said at least one retrieved cell.
- 1 59. (Newly Presented) The method of claim 58 further 2 comprising the step of weighting key words and retrieved cells 3 according to pre-defined search criteria.
- 1 60. (Newly Presented) The method of claim 58 further comprising the step of filtering key words and retrieved cells 3 according to pre-defined search criteria.
- 1 61. (Newly Presented) A method for storing and retrieving 2 data in a computer system memory comprising the steps of:
- 3 configuring an extensible logical table in a computer system 4 memory to include:
- 5 a plurality of rows, each row corresponding to a 6 record of information;

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a plurality of columns intersecting said plurality
of rows to define a plurality of cells; and
at least one cell in a first row including an
annotation such that said annotation cell is fully
integrated into said extensible logical table; and
performing an operation on said cell including said
annotation.

- 1 62. (Newly Presented) The method of claim 61 wherein said 2 operation comprises indexing.
- 1 63. (Newly Presented) The method of claim 61 wherein said 2 annotation cell includes hypertext.
 - 64. (Newly Presented) A data storage and retrieval system for a computer having a memory, a central processing unit and a display, comprising:

means for configuring said memory according to an extensible logical table, said extensible logical table including:

a plurality of cells, each said cell having a first address segment and a second address segment;

a plurality of attribute sets, each said attribute set including a series of cells having the same second address segment, each said attribute set including an object identification number (OID) to identify each said attribute set; and

a plurality of records, each said record including a series of cells having the same first address segment, each said record including an OID to identify each said record, wherein at least one of said records has an OID equal to the OID of a corresponding one of said attribute sets, and at least one of said records includes a fields cell having references to a plurality of attribute sets.

65. (Newly Presented) The system of claim 64 wherein said fields cell further comprises information related to each of said 7902



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3 referenced attribute sets.

1 66. (Newly Presented) The system of claim 64 further 2 comprising:

means for performing an operation on data within said referenced attribute sets according to said at least one record.

- 1 67. (Newly Presented) The system of claim 66 wherein said 2 operation comprises at least one of the following: an editing 3 operation, a printing operation, a searching operation or an 4 exporting operation.
- 1 68. (Newly Presented) The system of claim 64 wherein said 2 at least one record comprises a template for a structured e-mail 3 message.
 - 69. (Newly Presented) A data storage and retrieval system for a computer having a memory, a central processing unit and a display, comprising:

means for configuring said memory according to an extensible logical table, said extensible logical table including:

a plurality of cells, each said cell having a first address segment and a second address segment;

a plurality of attribute sets, each said attribute set including a series of cells having the same second address segment, each said attribute set including an object identification number (OID) to identify each said attribute set;

a plurality of records, each said record including a series of cells having the same first address segment, each said record including an OID to identify each said record, wherein at least one of said records has an OID equal to the OID of a corresponding one of said attribute sets;

at least one cell in a first record including a definition, said definition including a reference to at least one attribute set; and

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21 means for automatically adding to said at least one cell a 22 reference to a second record according to said definition.

- 70. (Newly Presented) The system of claim 69 wherein said definition comprises a reference to every record that includes a valid value in a first attribute set.
- 71. (Newly Presented) The system of claim 69 wherein said definition comprises a query that results in references to a plurality of rows that satisfy the query.
- 72. (Newly Presented) The method of claim 69 wherein said first record comprises a folder type record.
 - 73. (Newly Presented) A data storage and retrieval system for a computer having a memory, a central processing unit and a display, comprising:

means for configuring said memory according to an extensible logical table, said extensible logical table including:

a plurality of cells, each said cell having a first address segment and a second address segment;

a plurality of attribute sets, each said attribute set including a series of cells having the same second address segment, each said attribute set including an object identification number (OID) to identify each said attribute set, at least one of said attribute sets including information to indicate an indexing method corresponding to said attribute set;

a plurality of records, each said record including a series of cells having the same first address segment, each said record including an OID to identify each said record, wherein at least one of said records has an OID equal to the OID of a corresponding one of said attribute sets; and means for indexing said at least one attribute set according to said indexing method.

74. (Newly Presented) The system of claim 73 wherein: at least one of said cells includes a pointer to an index record; and

said means for indexing further comprises:

means for searching said extensible table for at least two key words; and

means for creating index records for at least two key words, said index records including one or more pointers to cells in said extensible table that contain said key words.

75. (Newly Presented) The system of claim 74 further comprising:

means for locating one of said index records according to the query of a user;

means for retrieving at least one cell in said extensible table pointed to by said located index record.

76. (Newly Presented) The system of claim 75 wherein said means for locating one of said index records further comprises means for locating at least one of said index records pointed to by said at least one retrieved cell.

- 77. (Newly Presented) The system of claim 76 further comprising means for weighting key words and retrieved cells according to pre-defined search criteria.
- 78. (Newly Presented) The system of claim 77 further comprising the step of filtering key words and retrieved cells according to pre-defined search criteria.
- 79. (Newly Presented) A data storage and retrieval system
 for a computer having a memory, a central processing unit and a
 display, comprising:

means for configuring said memory according to an extensible logical table, said extensible logical table including:

a plurality of cells, each said cell having a first

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